WHAT IS CLAIMED IS:

1. A method for preparing phosphors comprising the steps of:

(a) providing a solution comprising an alkoxide precursor and a dopant precursor;

(b) mixing said solution with a solid particle precursor;

(c) inducing a sol-gel condensation reaction to form a sol-gel condensation reaction mixture;

(d) drying the sol-gel condensation reaction mixture; and

(e) firing the dried reaction mixture at a temperature sufficient to form phosphors.

2. The method according to claim 1, wherein said solution further comprises a hydrolysis agent.

3. The method according to claim 1, wherein a hydrolysis agent is added after said step (b).

4. The method according to claim 3, wherein said hydrolysis agent is added immediately before step (c).

5. The method according to claim 1, wherein said solution further comprises a reagent capable of inhibiting condensation reactions before step (b) (stabilizing agent) in said solution.

6. The method according to claim 1, wherein said solid particle precursor have an average particle size of from about 2 to about 10,000 nm.

7. The method according to claim 2, wherein said hydrolysis agent is selected from the group consisting of water.

8. The method according to claim 3, wherein said hydrolysis agent is selected from the group consisting of water, tetramethylammonium hydroxide, and mixtures thereof.

9. The method according to claim 1, wherein said dopant precursor is an alkoxide, an acetate, an organometallic compound, an inorganic salt, or mixtures thereof.

10. The method according to claim 1, wherein said solid particle precursor is silica, metal oxide, metal sulfide, metal oxysulfide, metal halide, metal carbonate,

metal phosphate, metal sulfate, semiconductor-oxide, pure metal or mixtures thereof.

11. The method according to claim 10, wherein said solid particle precursor is fumed silica.

12. A phosphor product obtained from the process according to claim 1.

13. The phosphor product according to claim 12, wherein said product is included in a TV screen, a field emission display, a plasma display, a phosphor screen, a phosphor component for an electroluminescence display, a field emission or plasma display that does not have a conventional screen (i.e., luminescent components built into or on a substrate), an x-ray imaging display, or a detector for x-ray or charged particles.

14. A phosphor product according to claim 12, wherein the cathodoluminescence of said phosphor product increases substantially in a linear fashion with increasing voltage.

15. The phosphor product according to claim 14, wherein said product is

included in a TV screen, a field emission display, a plasma display, a phosphor screen, a phosphor component for an electroluminescence display, a field emission or plasma display that does not have a conventional screen (i.e., luminescent components built into or on a substrate), an x-ray imaging display, or a detector for x-ray or charged particles.

16. A phosphor product according to claim 14, wherein the cathodoluminescence of said product increases substantially in a linear fashion at increasing voltages between 2.0 kV and 3.5 kV.

17. The phosphor product according to claim 16, wherein said product is included in a TV screen, a field emission display, a plasma display, a phosphor screen, a phosphor component for an electroluminescence display, a field emission or plasma display that does not have a conventional screen (i.e., luminescent components built into or on a substrate), an x-ray imaging display, or a detector for x-ray or charged particles.